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Title: SEATBELT AIRBAG
Response

In the Specification

Please amend the paragraph beginning at page 5, line 5 to read as follows:

BRIEF DESCRIPTION OF THE DRAWING

The present invention will be better understood from a reading of the following detailed description, taken in conjunction with the accompanying drawing figures in which like references designate like elements and, in which:

FIG. 1 is a perspective view of a seatbelt incorporating features of the present invention;

FIG. 2 is an exploded perspective view of a seatbelt incorporating features of the present invention;

FIG. 3 is a cutaway view of the seatbelt of FIG. 1 in the region of lines ~~33~~ 3-3;

FIG. 4 is a cutaway view of the seatbelt of FIG. 1 in the region of lines ~~44~~ 4-4;

FIG. 5 is a view of the seatbelt of FIG. 1 in the deployed condition;

FIG. 6 is a plan view of an alternative embodiment of a reinforcing sleeve incorporating features of the present invention.

FIG. 7 is a view of a seatbelt tongue for use with a seatbelt incorporating features of the present invention;

FIG. 8 is a cross-sectional view of the seatbelt tongue of FIG. 6 7;

FIG. 9 is a plan view of a prior art "Box X" stitch for joining portions of seatbelt webbing together;

FIG. 10 is a side view of an inflatable airbag for use in a seatbelt incorporating features of the presentation invention; and

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FIG. 11 is a plan view of a stitching pattern for securing the airbag within the seatbelt webbing in accordance with the present invention.

Please amend the paragraph beginning on page 7, line 6 to read as follows:

With reference to FIG. 2, the principal components of the seatbelt of FIG. 1 comprise the end fitting 14 to which seatbelt 12 is attached proximal to the floor of the vehicle. Seatbelt 12 passes through eyelet 16 of tongue fitting 18 through D-ring 22 to a conventional retractor 30. Tongue fitting 18 is adapted to be received in a buckle 32 in a conventional manner. Disposed within seatbelt 12 is airbag 34 which, in the illustrative embodiment comprises an elongate tubular bag composed of 210 x 210 denier silicone coated nylon fabric that is folded into five pleats along one edge in a so-called "rooster tail" fold pattern to form a relatively flat ribbon of material contained within seatbelt 12. Inflator 28 is disposed within airbag 34 proximal fixed end 36 of seatbelt 12. A reinforcing sleeve is disposed around airbag 34 within seatbelt 12. In the illustrative embodiment, reinforcing sleeve 38 comprises an elongate tube composed of up to 1000 x 1000 denier polyester but preferably 500 x 1000 denier polyester, with the 1000 denier fibers running in the circumferential direction. Seatbelt 12, reinforcing sleeve 38 and airbag 34 are stitched together proximal the fixed end 36 of seatbelt 12 to form a relatively leak free end. The length of reinforcing sleeve 38 is selected such that the open end 40 of reinforcing sleeve 38 extends just past eyelet 16 of tongue fitting 18 when seatbelt 12 is being worn by a 95th percentile male. Open end 40 of sleeve 38, therefore, extends substantially into torso portion 26 of seatbelt 12 when being worn by a ~~5~~ 5th percentile woman. Because the illustrative seatbelt airbag is self-adjusting as described more fully herein, it is inconsequential that the reinforcing

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sleeve 38 extends substantially into torso portion 26 as long as sleeve 38 extends at least to tongue fitting 18.

Please amend the paragraph beginning on page 8, line 3 to read as follows:

The construction of the inflatable seatbelt apparatus 10 of the illustrative embodiment is described in further detail with reference to FIGs. 3 and 4. FIG. 3 depicts a portion of inflatable seatbelt apparatus 10 in lap portion 24. In lap portion 24, inflatable seatbelt apparatus 10 comprises three layers, namely the inner airbag 34, the reinforcing sleeve 38 and the outer seatbelt 12. Although seatbelt 12 has substantial axial strength, it is designed to fail circumferentially under the pressure of airbag 34 when it inflates. To that end, seatbelt 12 may be provided with a longitudinal seam 42 41 at one or both edges, or seatbelt 12 may be scored, stitched, creased or otherwise provided with a weakened area running along the length of seatbelt 12 in the area surrounding airbag 34. (As used herein, the weakened area is referred to as a seam irrespective of whether it is a true seam or some other feature provided area functions as a locally weakened area.) Reinforcing sleeve 38, however, has sufficient circumferential strength to resist rupturing under the pressure of airbag 34 as it inflates.

Please amend the paragraph beginning on page 9, line 13 to read as follows:

As noted hereinbefore, in the illustrative embodiment, reinforcing sleeve 38 comprises up to 1000 x 1000 denier polyester but preferably a 500 x 1000 denier polyester fabric tube with the 1000 denier fibers running in the circumferential direction. Accordingly, reinforcing sleeve 38 does not tear under the inflation pressure of airbag 34. In an alternative embodiment,

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as shown in FIG. 6, reinforcing sleeve 38 is made from a somewhat lighter material, for example a 500 x 500 denier polyester. Since the fabric is relatively notch sensitive, although it will not rupture under the inflation pressure of airbag 34, it can be designed so that a tear will propagate if a stress concentration is provided. To this end, as shown in FIG. 6, a notch 44 is cut transverse to open end 46 of reinforcing sleeve 48. The notch 44 in combination with the lighter circumferential denier of reinforcing sleeve 48, permits a tear in reinforcing sleeve 48 to propagate from open end 46 toward tongue fitting 18 as airbag 34 is deployed. As with the embodiment of FIGs. 1-5, this enables the airbag to fully inflate across torso portion 26 irrespective of the size of the occupant.